<u>Abstract</u>

The invention concerns a method of and an apparatus for continuously desalinating water by reverse osmosis, in particular desalinating sea water, wherein

- salt water (10) is introduced under a first pressure (p1) by means of a delivery pump (1) into a pressure compensating device (2),
- salt water (11) is continuously introduced from the pressure compensating device (2) at a second increased pressure (p2) into a membrane module (3) and separated therein by means of a membrane (6) into desalinated water (12) and concentrated salt water (13), and
- the concentrated salt water (13) discharged from the membrane module (3) is continuously introduced under approximately the second pressure (p2) into the pressure compensating device (2) and used there for acting with approximately the second pressure (p2) on the salt water (10) introduced into the pressure compensating device (2) and for introducing the salt water (11) into the membrane module (3). In order to avoid disturbances in operation and possibly damage to the membrane (6) because of a reduced flow over the membrane surface, it is provided in accordance with the invention that a continuous flow of the salt water (11) introduced into the membrane module (3) is maintained over the surface of the membrane (6) by means of salt water discharged from a reservoir (15; 403, 20).